

CLAIMS

1. A casing material for a storage cell being made of an austenitic stainless steel comprising C: not more than 0.03 mass%, Si: 0.01-0.50 mass%, Mn: not more than 0.20 mass%, P: not more than 0.04 mass%, S: not more than 0.0010 mass%, Ni: 20.0-40.0 mass%, Cr: 20.0-30.0 mass%, Mo: 5.0-10.0 mass%, Al: 0.001-0.10 mass%, N: 0.10-0.50 mass%, Ca: not more than 0.001 mass%, Mg: 0.0001-0.0050 mass%, O: not more than 0.005 mass%, provided that contents of Cr, Mo and N satisfy a relation of the following equation (1), and the balance being substantially Fe and inevitable impurities, in which a content of CaO as an oxide inclusion in steel is not more than 20 mass%:

$$\text{Cr} + 3.3 \times \text{Mo} + 20 \times \text{N} \geq 43 \quad \dots (1)$$

(wherein each content of Cr, Mo and N is represented as mass%).

2. A casing material for a storage cell according to claim 1, which is a re-rolled material having a hardness of not less than 280 HV as a Vickers hardness by subjecting to a second cold rolling at a rolling reduction of 15-25% after a final annealing.

3. A casing material for a storage cell according to claim 1 or 2, which further contains one or more elements of Cu: 0.01-1.00 mass%, W: 0.01-1.00 mass%, Co: 0.01-1.00 mass%, V: 0.01-1.00 mass%, Nb: 0.01-1.00 mass%, Ti: 0.01-1.00 mass% and B: 0.0001-0.0100 mass%.